

## **S5 micron** User Manual

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Thank you for buying the S5 micron camera.

Entirely manufactured with CNC machinery, the S5 is a very innovative camera of the latest generation, with technical solutions that makes it unique in the field of high resolution digital photography.

All the controls are micrometric to ease the focusing on the reduced format of the digital sensor.

Some of the solutions are unique; especially in the use of short and extremely short focal lenses allowing tilt, swing and shift movements inconceivable until today. In fact the constructive solutions of the S5 allow the standards to be in very close contact, the use of soft or hybrid bellows and the recessed lens boards amplify this characteristic to a point which no other view camera can boast.

Although the S5 micron has been projected for digital photography, its performances show also in analogue photography in the basic 6x9 format where its precision and sturdiness reveal to be even overdimensioned.

Let's see what the S5 looks like when delivered to you:

- The S5 camera travels safely in its ABS case which in turn is placed inside a cardboard box.
- Inside the case the S5 micron, the camera body and standard bellow in the basic configuration, is protected by a moulded insert, the warranty and these instructions.



## Camera Assembly :

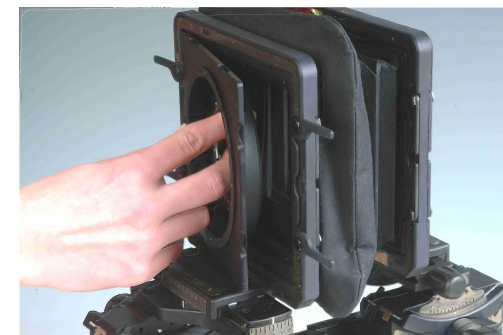
1) The camera assembly can be made laying the camera on a table (the base is large enough to ensure a good support), even if the use of an appropriate tripod is certainly suggestable. For this purpose the S5 has in its base the two classic fastener threads 1/4" and 1/8". Take care to screw in depth the screw inside the camera base before actioning the locking nut to avoid damages to the thread.



2) Now open the 4 levers (1) on the back standard and insert the bellow in its place, then close the levers until blocking the bellow; now open the 4 levers (1) on the front standard and repeat the same operation until the blocking of the bellow.



3) Mount the back plate with the standard Silvestri 4 points attachment in the back standard by using the 4 levers as explained at point 2, the plate has to be positioned with the two reference red dots one to the top and the other to the right. Sliding Back Adapters and format backs for analogue photography fit on this plate, aline the four red dots to find the position of insertion.



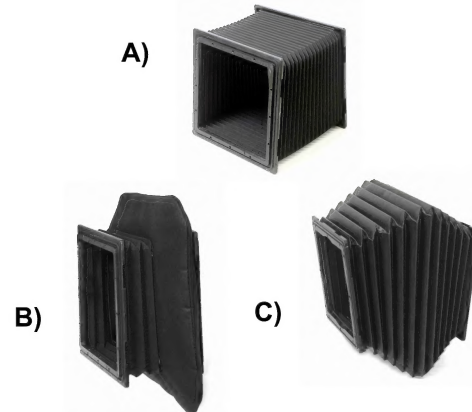
## Accessories and their use:

### Bellows

a) Standard; square and parallel, for medium-long focal length lenses.

b) Wide angle; for short and medium focal length lenses.

c) Biconic; for lenses of medium long focal length, for wide tilt and swing movements.



**ATTENTION!** when removing the bellow DO NOT pull the bellow's fabric but first push the metal frame from the inside out of its place in both standards.

### Lens boards:

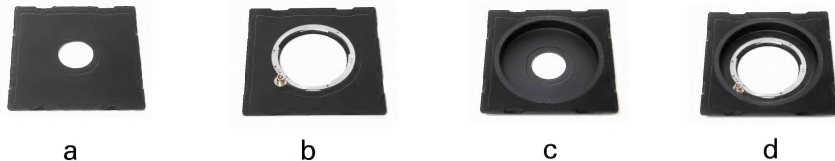
a) Lens board with n. 0 hole, for lenses in 0 shutter.

b) Lens board with silvestri bayonet, for lenses with Silvestri bayonet mounting.

c) Recessed lens board with n. 0 hole, for lenses in n.0 shutter

d) Recessed lens board with Silvestri bayonet, for lenses in Silvestri bayonet mounting.

The recessed lens board are needed for short focal lenses ( f.i. 24/35/47/60mm Schneider, 35/45/55 Rodenstock).



### Shutters Available:

Copal 0 & 1 : Mechanical shutter with manual loading, manual diaphragm setting, times from 1" to 1/500" + B and T poses.

Copal Press 0 & 1: Mechanical shutter with preselection of the diaphragm and automatic loading, times from 1" to 1/125" + B pose.

Prontor/Silvestri n. 0 : Magnetic shutter with electronic control, it is activated by the Silvestri Remote Control Unit code 7053K. This type of shutter is needed for Multishot and Microstep digital backs. Selection of times from the remote control unit, selection of diaphragms from the shutter.

Schneider 0 shutter: Magnetic shutter with electronic control, it is activated by the Silvestri Remote Control Unit code 7053K: selection of times and diaphragms. Needed for Microstep and Multishot digital backs.

- Rollei Electronic shutter, times and diaphragms are activated by the Rollei remote control unit which also supplies cables and interfaces.

**The S5 can use a wide range of lenses. These lenses mounted on bayonet rings are very compact and they allow a rapid and precise positioning.**



The lenses in Silvestri bayonet are available with two different shutters: mechanical Copal (24) or Prontor Magnetic (23). This second version, suitable for multishot and microstep has to be controlled by our remote control unit (22).



## Digital Lenses in Bayonet

Schneider	Copal 0	Prontor Magnetic	Schneider Electronic
Apo Digitar 5,6/24XL	D7224	2250K	2250KS
Digitar 2,8/28L	D7202	2329K	2329KS
Apo Digitar 5,6/35XL	D7201	2240K	2240KS
Apo Digitar 5,6/47XL	D7218	2248K	2248KS
Apo Digitar 4/60N	D7206	2261K	2261KS
Apo Digitar 5,6/72L	D7207	2273K	2276KS
Apo Digitar 4/80N	D7208	2281K	2281KS
Apo Digitar 4,5/90N	D7212	2291K	2291KS
Apo Digitar 5,6/100N	D7214	2214K	2214KS
Apo Digitar 5,6/120N	D7216	2212K	2212KS
Apo Digitar 5,6/150N	D7225	2215K	2215KS
Apo Digitar 5,6/180T	D7248	2284K	2284KS
Apo Digitar 5,6/80M	D7210	2282K	2282KS
Apo Digitar 5,6/120M	D7250	2213K	2213KS

Rodenstock	Copal 0	Prontor Magnetic
HR Digaron S 5,6/23	D7236	2323K
HR Digaron S 4,5/28mm	D7226	2234K
HR Digaron W 4,0/32mm	D8032	3232K
HR Digaron S 4/35mm	D7228	2236K
HR Digaron W 4,0/40mm	D7448	2346K
HR Digaron W 4,0/50mm	D7450	3250K
HR Digaron S 4/60mm	D7234	2266K
HR Digaron W 5,6/70mm	D7231	2278K
HR Digaron W 5,6/90mm	D7237	2295K
HR Digaron S 4/100mm	D7239	2268K
Apo Sironar Digital 4,5/45mm	D7230	2245K
Apo Sironar Digital 4,5/55mm	D7232	2255K
Apo Sironar Digital 5,6/70mm	D7233	2276K
Apo Sironar Digital 5,6/90mm	D7238	2293K
Apo Sironar Digital 5,6/105mm	D7240	2205K
Apo Sironar Digital 5,6/135mm	D7242	2217K
Apo Sironar Digital 5,6/150mm	D7244	2218K
Apo Makro Digital 5,6/120mm	D7246	2221K



table 2

## Working apertures, image angles, image circles and movement ranges

### Rodenstock HR Digaron

Lens	Image scale	Recom. working f-stop	Image angle	Image circle diameter	Movement range [mm] vertical / horizontal					
					24x36 mm	37x37 mm	33x44 mm	37x49 mm	36x56 mm	40x54 mm
40 mm f/4	1: ∞	5,6-8	94°	90mm	29 / 25	29 / 25	29 / 25	29 / 25	29 / 25	29 / 25
50 mm f/4	1: ∞	5,6-8	84°	90mm	29 / 25	29 / 25	29 / 25	29 / 25	29 / 25	29 / 25
70 mm f/5.6	1: ∞	5,6-8	70°	100mm	35 / 31	35 / 31	35 / 31	35 / 31	35 / 31	35 / 31
90 mm f/5.6	1: ∞	5,6-11	70°	125mm	48 / 43	48 / 43	48 / 43	48 / 43	48 / 43	48 / 43
23 mm f/5.6	1: ∞	5,6-8	112°	70mm	18 / 15	11 / 11	11 / 9	7 / 5	3 / 2	2 / 2
28 mm f/4.5	1: ∞	5,6-8	101°	70mm	18 / 15	11 / 11	11 / 9	7 / 5	3 / 2	2 / 2
35 mm f/4	1: ∞	5,6	90°	70mm	18 / 15	11 / 11	11 / 9	7 / 5	3 / 2	2 / 2
60 mm f/4	1: ∞	5,6	60°	70mm	18 / 15	11 / 11	11 / 9	7 / 5	3 / 2	2 / 2
100 mm f/4	1: ∞	5,6	39°	70mm	18 / 15	11 / 11	11 / 9	7 / 5	3 / 2	2 / 2
180 mm f/5.6	1: ∞	5,6-8	25°	80mm	24 / 20	17 / 17	17 / 14	13 / 11	11 / 8	9 / 8

### Rodenstock Apo Sironar digital / Apo-Macro-Sironar digital

35 mm f/4.5	1: ∞	8-11	111°	105mm	28 / 25	26 / 21	25 / 22	21 / 18		
45 mm f/4.5	1: ∞	8-11	107°	125mm	39 / 35	38 / 32	36 / 32	32 / 29	8 / 7	4 / 3
55 mm f/4.5	1: ∞	8-11	95°	125mm	39 / 35	38 / 32	36 / 32	32 / 29	8 / 7	4 / 3
105 mm f/5.6	1: ∞	8-11	62°	125mm	39 / 35	38 / 32	36 / 32	32 / 29	8 / 7	4 / 3
135 mm f/5.6	1: ∞	8-11	58°	150mm	53 / 48	52 / 45	50 / 45	46 / 42	25 / 22	21 / 18
150 mm f/5.6	1: ∞	8-11	53°	150mm	53 / 48	52 / 45	50 / 45	46 / 42	25 / 22	21 / 18
180 mm f/5.6	1: ∞	8-11	45°	150mm	53 / 48	52 / 45	50 / 45	46 / 42	25 / 22	21 / 18
120 mm f/5.6	1:5 - 2:1	8-11	55°-24°	150mm	53 / 48	52 / 45	50 / 45	46 / 42	25 / 22	21 / 18

### Schneider Apo Digitar

Lens	center filter	Recom. working f-stop	Image angle	Image circle diameter	Movement range [mm] vertical / horizontal					
					24x36 mm	31x31 mm	37x37 mm	36x48 mm	37x49 mm	63x63 mm
5.6/24 XL	Ild	5,6-11	100°	60mm	12 / 9.5	10 / 10	5.1 / 5.1	0 / 0		
2.8/28 L		2,8-11	92°	60mm	12 / 9.5	10 / 10	5.1 / 5.1	0 / 0		
5.6/35 XL	Ilf	5,6-11	88°	70mm	29 / 25	27 / 27	23 / 23	20 / 17	19 / 17	0.6 / 0.6
5.6/47 XL	Il	8-11	92°	98mm	42 / 37	39 / 39	35 / 35	33 / 30	32 / 29	15 / 15
4.0/60 N		4-11	53°	60mm	12 / 9.5	10 / 10	5.1 / 5.1	0 / 0		
5.6/72 L		5,6-11	62°	90mm	29 / 25	27 / 27	23 / 23	20 / 17	19 / 17	0.6 / 0.6
4.0/80 L		5,6-11	53°	80mm	29 / 25	27 / 27	23 / 23	20 / 17	19 / 17	0.6 / 0.6
4.5/90 N		4,5-11	53°	90mm	29 / 25	27 / 27	23 / 23	20 / 17	19 / 17	0.6 / 0.6
5.6/100 N		5,6-11	53°	100mm	35 / 31	32 / 32	28 / 28	26 / 23	25 / 22	7.3 / 7.3
5.6/120 N		5,6-11	48°	110mm	40 / 36	37 / 37	33 / 33	31 / 28	31 / 27	14 / 14
5.6/150 N		5,6-11	40°	110mm	40 / 36	37 / 37	33 / 33	31 / 28	31 / 27	14 / 14
5.6/180 T		5,6-11	37°	120mm	45 / 41	42 / 42	39 / 39	37 / 33	36 / 33	20 / 20

Schneider Macro Apo Digital

Lens	scale	Recom. working f-stop	Image angle	Image circle diameter	Movement range [mm] vertical / horizontal					
					24x36 mm	31x31 mm	37x37 mm	36x48 mm	37x49 mm	63x63 mm
Apo digitar 5.6/80M	1:4	5.6-11			21 / 18	19 / 19	14 / 14	11 / 8.9	9.9 / 8.1	
At scales exceeding 1:1	1:2	5.6-11			24 / 20	22 / 22	17 / 17	14 / 12	13 / 11	
the lens should not be	1:1	5.6-8	28°	80mm	24 / 20	22 / 22	17 / 17	14 / 12	13 / 11	
stopped down because	2:1	5.6	18.6°	80mm	24 / 20	22 / 22	17 / 17	14 / 12	13 / 11	
of increasing diffraction	4:1	5.6	12.6°	90mm	29 / 25	27 / 27	23 / 23	20 / 17	19 / 17	0.6 / 0.6
Apo Digitar 5.6/120 M	1:4	5.6-11			24 / 20	22 / 22	17 / 17	14 / 12	13 / 11	
At scales exceeding 1:1	1:2	5.6-11			29 / 25	27 / 27	23 / 23	20 / 17	19 / 17	0.6 / 0.6
the lens should not be	1:1	5.6-8	26°	110mm	40 / 36	37 / 37	33 / 33	31 / 28	31 / 27	14 / 14
stopped down because	2:1	5.6	17.4°	110mm	40 / 36	37 / 37	33 / 33	31 / 28	31 / 27	14 / 14
of increasing diffraction	4:1	5.6	10.5°	110mm	40 / 36	37 / 37	33 / 33	31 / 28	31 / 27	14 / 14

Adapter back plate for S5 micron camera

This plate has a Silvestri 4 points attachment with engagement in 8° of rotation on which the above mentioned back adapters can be mounted. Moreover all accessories produced in the past for the Silvestri standard attachment can continue to be used on this camera.



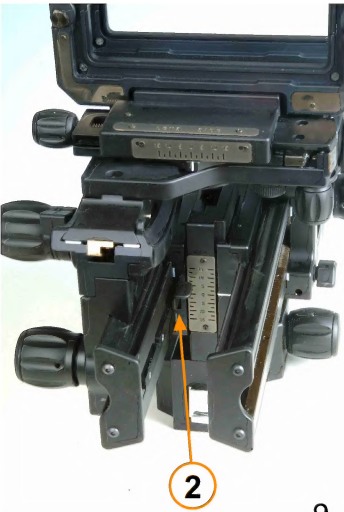
Adapter backs

- Standard 6x9 back with Graflex attachment, for 120 and 220 roll film holders.
- Stitching Sliding back adapter for one or two shots with drop-in plate. (see the specific User manual).
- Live video adapters



Focusing and fast extensioning of the rails:

S5 micron have two separate knobs for focusing, one activate the front group, the other activate the rear group; both of them have a micrometric movement and the locking system. The utility of the two independent focusing systems becomes evident when working in close-up still life photography, where the use of frontal adjustment produces enlargment variation and the rear one the focusing adjustment. The fast extensioning of the rails is made by pushing the unlock button (2); on the front or back side depending on the side you want to extend. The system has various determined auto - locking positions.





## How to mount components on the standards:

By mean of the 4 levers placed on each side of the standards, it is possible to simply interchange the various components of the S5 micron camera. Open the levers, insert the lens board and close the levers; the lens board is locked in place. The system is substantially the same for the three main components: Backs, Lenses and Bellows.



## Precautions in the mounting and the handling:

- a) Lenses; when mounting them in the camera body, extend the view camera to avoid the lens rear element from hitting against the back.  
As a general precaution, keep the lenses well protected with their caps, to avoid scratches and abrasions on the lenses and at the same time to keep them clean and perfectly working. The dry dust must be removed by brushes or sprays specific for this purpose and free of greasy components. The greasiness of hands degrade the image and they must be removed completely with appropriate products. Moreover the lenses must not suffer impacts, falls or anything else could cause damages to the mechanical elements. Do not dismantle the lens, as they often include small shims inserted by the manufacturer that could go lost.
- b) Sliding adapters; These components fit the standard Silvestri 4 points attachments by a 8° clockwise movement, the red dots indicate the entering position. During the manipulation and mounting avoid touching the focusing screen and the fresnel lens, these elements are particularly delicate and can be easily damaged; when cleaning them, do not use strong solvent substances like alcohol, diluent, acetone, etc. but specific products.
- These precautions must also be taken for every part containing lenses and mirrors or other similar elements. Do not keep the camera and its accessories in damp rooms or in high heat. this could cause damages and a fast degrade in the general functions of the equipment.

A



- 3 - Rise movement
- 4 - Side shift
- 5 - Rotation on the vertical axis
- 5a - Rotation lock
- 6 - Rotation on the horizontal axis
- 7 - Focus adjustment on the front body and on the rear body
- 8 - Locking system for the focus adjustment
- 9 - Unlock button for fast extension of the rails

## Technical information

- Direct rise; 30mm upwards - 30mm downwards in total (front + rear). (3)
- Total side shift; 30mm to the right + 30mm to the left (front + rear). (4)
- Swing and Tilt movements:
- Rotation on the vertical axis: more than 15° right plus 15° left in each group. (5)
- Rotation on the horizontal axis: more than 15° plus more than 15° on each group. (6)
- Minimum distance between the standards = 0 mm (7)
- Maximum distance between the standards = 200mm (7)
- Lens fitting: Silvestri/S5 lens board, Silvestri bayonet.
- Back fitting system: Silvestri/S5 board, board with standard 4 points rapid attachment.
- Dimension height 330mm , Large 210mm , Depth 210 (Compact)
- Weight Kg. 4